

50. The method of claim 4, wherein the error correcting step includes combination of said first and second demodulated signals within or subsequent to the determination by the error correction decoding process of the data most likely transmitted.

It could
51. The cellular mobile radio telephone of according to claim 14, further comprising CDMA post detection selection combining means for selecting on a symbol-by-symbol basis from either the first demodulated signal or the second demodulated signal the symbols that are to be error corrected.

52. The cellular mobile radio telephone of according to claim 14, further comprising, error correcting means for combination of said first and second demodulated signals within or subsequent to the determination an error correction decoding process of the data most likely transmitted. ✓

REMARKS

Claims 1-48 are pending. New claims 49-52 have been added by this amendment. Reconsideration of the outstanding rejections is respectfully requested in light of the following remarks.

Claims 23-48 were rejected under the judicially created doctrine of double patenting over claims 1-12 of U.S. Patent No. 5,151,919, or claims 1-12 of U.S. Patent No. 5,295,153, or claims 1-40 of U.S. Patent No. 5,218,619, or claims 1-43 of U.S. Patent No. 5,430,760, or claims 1-35 of U.S. Patent No. 5,239,557, or claims 1-67 of

U.S. Patent No. 5,353,352, or claims 1-17 of U.S. Patent No. 5,295,152, or claims 1-44 of U.S. Patent No. 5,237,586. This rejection is respectfully traversed.

The Action alleges "the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: communication in a CDMA system using subtractive demodulation." The Action goes on to state "Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968)."

The non-statutory double patenting rejection upheld in *Schneller* was made only to prevent extension of patent rights, as stated in the Action, "since the claims, if allowed, would improperly extend the 'right to exclude' already granted in the [issued] patent[s]." However, Applicants have already submitted a declaration, on June 21, 1996 claiming priority from U.S. Patent 5,159,919 filed December 17, 1990. Therefore, any patent issuing from the present application would be limited to a term of 20 years from the filing date of December 17, 1990. In otherwords, each of the other patents cited above would expire after any patent granted from the present application. Therefore, it is respectfully submitted that the non-statutory double patenting suggested in *Schneller* is inappropriate as there can be no "extension" of the right to exclude.

Finally, it is Applicants' understanding that the U.S. P.T.O. has recently reversed its policy making blanket "*Schneller*" rejections in light of recent U.S. Patent Board of Appeals decisions.

of the this detection process is a sequence of **encoded data symbols** (Emphasis added)." Blakeney, at lines 54-65, goes on to state that the outputs of receivers 40 and 42 are provided to diversity combiner and decoder circuitry 48. The diversity combiner circuitry and decoder circuitry contained within the circuitry 48 adjusts the timing of the two streams of received signals into alignment and adds them together. The diversity combiner is described, as is known to one skilled in the art, as a maximal ratio diversity combiner. "The resulting **combined** signal stream **is then decoded** using a forward stream error detection decoder." Thus, according to Blakeney, the output of receivers 40 and 42 provides "encoded" data symbols to the diversity combiner which then combines the signals and then decodes the combined signal. This is also known in the art as "pre-detect combining." Therefore, Blakeney does not describe Applicants' "post detect combining" wherein the first and second signals are **decoded** to produce **first** and **second** demodulated **signals**.

With respect to Applicants' claim 15 combination, the Office Action points to column 19, lines 24-42, as allegedly describing that Applicants' claimed first and second codes include a base station code and a traffic channel code. While the cited portion of Blakeney does refer to "base station identifications", it does not do so in the context of codes which are "used to process and decode numerical values to obtain demodulated signal" as are Applicants' first and second codes. That is, the cited portion of Blakeney does not indicate that the base station identifications are used in the same manner as Applicants' claimed first and second codes and, therefore, cannot be said to correspond thereto.

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As Blakeney fails to describe each and every element of Applicants' claims, it cannot serve as a basis of rejection under § 102(e) and therefore it is respectfully requested that the rejection of claims 14 and 15 be reconsidered and withdrawn.

Claims 23-48 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 5,295,153 to Gudmundson, or U.S. Patent No. 5,151,919 to Dent, or U.S. Patent No. 5,218,619 to Dent, or U.S. Patent No. 5,430,760 to Dent, or U.S. Patent No. 5,239,557 to Dent, or U.S. Patent No. 5,353,352 to Dent et al., or U.S. Patent No. 5,295,152 to Gudmundson et al., or U.S. Patent No. 5,237,586 to Bottomley et al. This rejection is respectfully traversed.

Applicants respectfully point out that the rejection of these claims is improper under Section 102(e). Under Section 102(e) the invention must be described in a patent granted on an application filed before the invention thereof by the applicant for patent. It is respectfully submitted that none of the above patents were filed before Applicants' priority date of December 17, 1990 and therefore cannot anticipate Applicants' claims under Section 102.

In Applicants' declaration, Applicants claim priority under 35 U.S.C. § 120 of U.S. Patent 5,151,919 filed December 17, 1990. The Action states the subject matter claimed in the instant application is fully disclosed in the 5,151,919 patent and "is covered by the patent since the patent and the application are claiming common subject matter, as follows: communication in a CDMA system using subtractive demodulation." As the subject matter recited in claims 28-48 is fully disclosed in the in the 5,151,919

patent they are entitled to the priority date of December 17, 1990 and, therefore, it is respectfully requested that the rejections of claims 23-48 be reconsidered and withdrawn.

Claims 2, 7, 8, 9, 16 and 17 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Blakeney in view of U.S. Patent No. 5,159,608 to Falconer et al. ("Falconer"). This rejection is respectfully traversed.

Claims 2 and 7 are believed to be allowable for at least the same reasons given above for claim 14.

In addition Blakeney also fails to describe, among other things, that each signal received from a base station is encoded with a different scrambling code. In an attempt to provide this missing element the Action cites Falconer. The Action states that it would have been obvious to one of ordinary skill in the art to combine Falconer with Blakeney in order to "completely eliminate cross talk and to make it very difficult and costly to eavesdrop or track calls." However, the Action did not provide any evidence that any of these problems existed in Blakeney, such that one of ordinary skill in the art would have been motivated to include this feature of Falconer in Blakeney and therefore this combination is unsupported.

Claims 8 and 9 depend from claim 7 and are believed to be allowable for at least the same reasons. In addition, the Action points to col. 26, lines 59-66 as describing an "access code." However, the only reference to a code at these lines is the PN code which the Action previously describes as the base station code. It is respectfully submitted the PN code does not correspond to an access code as it is used instead for base station identification.

Claims 16 and 17 depend from claim 2 and 7 respectively and are believed allowable for at least the same reasons.

As neither Blakeney, nor Falconer, describe or suggest Applicants' invention, either singularly or in combination, they fail to establish a prima facie case of obviousness under Section 103 and therefore it is respectfully requested that the rejections of the claims be reconsidered and withdrawn.

Claims 1, 3-6 and 10-13 were rejected under 35 U.S.C. § 103 as allegedly being unpatentable over Blakeney. This rejection is respectfully traversed.

Applicants' claim 1 combination includes, among other things, "receiving at said mobile station said signals transmitted on said first frequency from said first and second base stations and **decoding said signals using said first and second codes to produce a first and second demodulated signal.**" As pointed out above, Blakeney neither describes nor suggests this feature of Applicants' invention. In marked contrast Blakeney provided encoded signals from the receivers 40 and 42 to the diversity combiner and decoder 48. The diversity combiner 48 combines the encoded signals from 40 and 42 and then decodes the combined signal using a Viterbi algorithm decoder.

Claims 3-6 depend from claim 1 and are believed allowable at least for the reasons given above. In addition, with respect to Applicants' claim 3 combination, note the discussion of claim 8 above. No disclosure of the claimed codes is provided in Blakeney which are used to perform the function set forth for those codes in Applicants' claim 3 combination. In otherwords, Blakeney fails to describe or suggest a base code

(described as the PN code) combined with a first access code. **No description of an access code is given.**

Claim 4 recites, among other features, "error correcting the demodulated signals." This feature of Applicants' invention is neither described nor suggested. It is pointed out the Blakeney specifically states at col. 13, lines 62-65, "the resulting combined signal stream is then decoded using a forward stream error detection decoder." Therefore, Blakeney does not describe or suggest, error correcting a first modulated signal and a second modulated signal but rather error corrects a combined signal.

Claim 5 recites, among other features, that the error correcting step comprises selecting symbols from the first and second demodulated signals. As discussed above, Blakeney does not describe or suggest at least this feature of Applicants' claimed invention. By contrast, Blakeney describes only a form a "maximal ratio combining." (See, Blakeney at col. 11, lines 6-17 which uses a weighted sum of the receiver outputs). In Blakeney, the selection operates on a whole signal (i.e., all symbols, after error correction decoding, using the output of one receiver alone) from one of the base stations, rather than on a symbol by symbol basis from either base station. Accordingly, reconsideration and withdrawal of the rejection of claim 5 is respectfully requested.

Claim 6 recites, among other features, that the error correction step comprises combining symbols from the first and second demodulated signals. Again in marked contrast, Blakeney uses a form of diversity combining in which the combining is performed first to produce a combined signal, followed by demodulation and error correction coding, operating on the single combined signal. (See Blakeney at col. 13,

lines 54-65). Blakeney does not describe or suggest that the error correction step comprises combining symbols from the first and second demodulated signals.

Accordingly, reconsideration and withdrawal of the rejection of claim 6 is respectfully requested.

Claims 10-13 are believed to be allowable for similar reasons to those set forth above with respect to claims 1 and 14, for example.

Claims 18-22 were rejected under 35 U.S.C. § 103 as allegedly being obvious over Blakeney in view of U.S. Patent No. 5,151,919 to Dent, or U.S. Patent No. 5,218,619 to Dent or U.S. Patent No. 5,430,760 to Dent, or U.S. Patent No. 5,239,557 to Dent, or U.S. Patent No. 5,353,352, to Dent et al., or U.S. Patent No. 5,295,152 to Gudmundson et al., or U.S. Patent No. 5,295,153 to Gudmundson, or U.S. Patent No. 5,237,586 to Bottomley et al. This rejection is respectfully traversed.

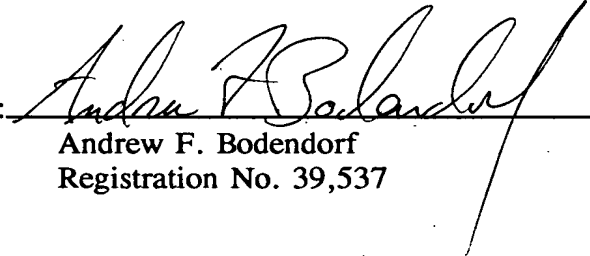
Claim 18-22 are believed allowable for at least the reasons given above for claims 1 and 14.

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It is respectfully submitted that all of the claims are now in condition for allowance and an early notice of the same is respectfully solicited. If any questions remain, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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